## PLOT THAT QUAKE

Ideally this project would occur over an entire year as it takes some time to generate enough quakes to illustrate plate boundaries. A one month sample begins to show the concept; the longer the better. This project may require some patience because the map will only start to look good with time. One possibility would be to schedule one time every day for data accumulation and map marking.

This exercise offers several possible ways to utilize the acquired data. In addition to tracking magnitude and depth, students could collect news information about larger earthquakes. It could also open up discussions on depth of quakes, how many small quakes there are compared to large quakes, plate tectonics, how geology effects people. Students could keep an earthquake journal, where they write the specifics, such as magnitude, location, and depth, and track news information. They could also try and figure out or find out what caused the earthquake (e.g. Was it a convergent, divergent, or transform boundary?)

This project is adapted from the following web site. http://www.seismo.berkeley.edu/seismo/istat/digiguide/EQ.html

The following web site gives an idea of how the data looks after 1, 7, 14, and 365 days. http://www.iris.edu/quakes/maps.htm

**Concept:** Earthquakes every day somewhere on the planet. Plotting them on a map is an easy way to illustrate plate boundaries.

**Objectives:** Students will

- $\Rightarrow$  check the Internet daily or weekly to locate earthquakes
- $\Rightarrow$  see that earthquakes occur regularly
- $\Rightarrow$  learn that earthquakes are related to plate boundaries

## Materials

- ⇒ A map of the world. Good source listed below. http://www.seismo.berkeley.edu/seismo/istat/digiguide/EQmaps.html
- $\Rightarrow$  A map of the Pacific Northwest (optional).
- $\Rightarrow$  A computer with Internet connection.
- $\Rightarrow$  Colored dots in different sizes and colors.

## Procedure

1. Have students plot earthquakes on map on wall or in their own notebook. Use different size dots to designate different magnitude and different colored dots to designate different depths.